

**OKLAHOMA AGRICULTURAL STATISTICS SERVICE**  
**Sampling Methods, Data Collection and Estimation**  
 Glenda Shepler, Deputy State Statistician

Oklahoma Agricultural Statistics Service produces hundreds of estimates every year pertaining to Oklahoma's agricultural economy. In order to produce these estimates, there are three major steps that are undertaken. These steps include selecting a sample, collecting the data for that sample, and then setting an estimate.

The first step is to select a sample. It is possible to sample only a small portion of the total population primarily due to cost efficiencies. Samples are selected from producers who have the commodity for which we are going to set an estimate. Probability and non-probability sampling is used to select a specific sample that is representative of the entire population. Some samples are selected from a list of producers, called a list sample, while other samples are selected based on a particular area of land and are referred to as area samples. Samples may cover a wide range of commodities or may be commodity specific. Larger producers tend to be sampled more often due to the impact their operations have on the entire estimate. We are continually searching for improved procedures and efficiencies for compiling these reports.

The second step of our program involves the data collection activities. Surveys are conducted by mail, telephone and personal interviews to collect the data necessary to set the estimates. We also conduct an objective yield survey where a sample is plotted in wheat and cotton fields and monthly measurements and counts are made to help determine yield. The major sources of reliable information for crop and livestock reports are those who know the most--producers, hatchery men, livestock feeders, slaughterhouse managers, grain elevator operators--the extensive users of the final estimates. Their cooperation is absolutely essential for a workable and useful crop, livestock, and price estimating program.

The third step in the process is to set the estimate. Data is summed to the State level and an estimate for Oklahoma is made after thorough analysis of the data. Comparisons are often made to previous year, previous quarter, or previous month data. Some estimates are also made at the district and county level. However, no estimates are ever published that would reveal an individual operation. All of our survey data is strictly confidential.

Most of the data used to calculate these statistics published by the Oklahoma Agricultural Statistics Service are collected by a part time staff of office and field enumerators. They are the heart of our data collection activities. This enumerator staff is employed through a cooperative agreement with the National Association of State Departments of Agriculture (NASDA). The National Agricultural Statistics Service is recognized as one of the premier statistical organizations in the world. That reputation rests in large part on the efforts of enumerators in every state of the Union who are the primary contact between the producers and our office.

Our Oklahoma enumerators not only work on data collection for Oklahoma, but also help out other States during time periods when they are short on enumerators. We are very proud of our 76 enumerators at Oklahoma Ag Statistics who have a combined average of over seven years of employment. These are people who enjoy their job and enjoy visiting with the producers of our State. If you are a producer, the next time you are called or visited in the field by one of our enumerators, we hope you can recognize one of the names below.

**Oklahoma NASDA Enumerators**

Teddi Archer	Judy Feigel	Connie F. Johnson	Karen A. Petty
Evelyn Ann Armstrong	Peggy G. Fifer	Luther E. Jones	Jerry M. Proctor
Emily M. Ashley	Ruth Fletcher	Joeann Kelley	Laura Ray
Verne A. Barnes	Lisa Kay Forsmark	Allene Lisle	Jerri Rector
Barbara A. Beckner	Beth Frantz	Patty L. Long	E. Joann Ross
Rena F. Bode	Cherri L. Gable	Jeanett M. Loucks	Byron L. Shook
Kathleen J. Brune	Gladys Green	Carol Beth Mahoney	Anne H. Smallwood
Jody Buckminster	Helen R. Gugino	Jan E. Marburger	Carla J. Stanley
Hazel P. Burke	Ramona Harville	Lynette A. Martin	E. Louise Stradley
Marion G. Campbell	Lori D. Herbel	Ronald Mays	Sharon L. Stuber
Harrell J. Cathey	Wayne Hess	Royce G. Meacham	Janice K. Sturgill
Denise Cunningham	Mickle R. Hoffman	Marsha Miller	Betty L. Tice
Laura J. Cunningham	Judith A. Holder	Mary C. Montgomery	Marianne Turner
Denzel Deaton	Tanya Hood	Sheila Moore	Sharon S. Vaughn
Deloris A. Demerson	Bob Hughes	Patricia E. Nettleton	Delores M. Waggie
Lori J. Denney	Billie Lou Hunter	Carol C. Nickels	Shirley J. Waters
Ange Doss	Barbara Hutcheson	Eloise Nuckolls	Kathryn Willis
Kesha Dyas	Judith N. James	Mary J. Parkey	Lodi Woolman
Betty J. Elrod	Fern Job	Joanna Peschl	Jerry A. Wrege